CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 88-079

WASTE DISCHARGE REQUIREMENTS FOR:

ST. MICHAEL WINERY
IN NAPA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. The St. Michael Winery (hereinafter called the Discharger) is located at 3999 St. Helena Highway, approximately two miles southeast of Calistoga, in Napa County. The Discharger, on December 14, 1984 filed a Report of Waste Discharge with the Board relative to the wastes treatment and disposal at the proposed 250,000-gallon-per-year winery with public tours and tasting. The Discharger was subsequently required to study the potential environmental impact of the proposed project in compliance with the California Environmental Quality Act.

2. The Discharger proposes to discharge the following wastes:

   (a) Waste-001 consists of winery process wastewater resulting from grape crushing, fermentation, aging, bottling, etc. for the production of 100,000 cases of wine and champagne per year. The annual waste generation rate is projected to be 1.25 million gallons at the ultimate production level. Majority of the wastewater is to be produced during the 60-day crushing season.

   (b) Waste-002 consists of the domestic wastewater generated from winery employees and visitors. Annual wastewater generation is projected to be 378,000 gallons per year.

3. Combined winery process wastes and domestic wastes will be screened and settled prior to being pumped to two aeration ponds located at the northeast corner of the winery property, with a total surface area of approximately 30,000 square feet. The two aeration ponds will be sealed to serve as holding ponds during the entire 6-month wet weather season. During dry weather period, effluent from the aeration ponds will flow by gravity to two evaporation/percolation ponds for disposal. The percolation ponds are located along the southeast border of the winery property, having a total surface area of 30,500 square feet and two feet in depth. Solids or sludge produced at the winery will be taken to sanitary landfill for disposal.

4. A seasonal stream, Nash Creek, flows east-northeast through the winery property and eventually discharges to the Napa River. Minimum distance between the percolation ponds and the Nash Creek is more than 700 feet. Attachment A is a location map and is hereby made a part of this Order.

5. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives for the Napa River and its tributaries.

6. The beneficial uses contained in the Basin Plan for the Napa River downstream from the vicinity of the Discharger's wastewater treatment and disposal facilities are:

   a. Municipal and domestic supply
   b. Agricultural Supply
   c. Navigation
   d. Water contact recreation
   e. Non-contact water recreation
   f. Warm fresh water habitat
   g. Cold fresh water habitat
   h. Wild life habitat
   i. Preservation of rare and endangered species
   j. Fish migration and spawning

7. The beneficial uses of the Napa Valley groundwaters as set forth in the Basin Plan includes:

   a. Municipal supply
   b. Industrial process water supply
   c. Industrial service supply
   d. Agricultural supply

8. On January 6, 1988, the Napa County Conservation, Development and Planning Commission adopted and certified a supplemental Environmental Impact Report (EIR). The EIR finds that the proposed project will not have a significant effect on the environment.

9. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the Discharger, pursuant to the provisions contained in Division 7 of the California Water code and regulations adopted thereunder, shall comply with the following:

A. Prohibitions

   1. There shall be no bypass or overflow of waste to waters of the State from the Discharger's wastewater collection, treatment, storage, or disposal facilities.

   2. Discharge of toxic substances into the ponds which will disturb the normal biological stabilization mechanisms of the ponds shall be prohibited.

3. The annual rate of discharge to the stabilization ponds shall not exceed the amount described in Finding 2 of this Order.

4. No waste shall be applied to the percolation ponds during the period of October 16 through April 15, or in the events of rainfall. During the disposal period of April 16 through October 15, the waste shall not be allowed to escape from the percolation ponds into waters of the State via surface flow or resurfacing after percolation.

B. Discharge Specifications

General

1. Neither the treatment nor the disposal of wastes shall create a nuisance or pollution as defined in the California Water Code.

2. The discharge of waste shall not degrade the quality of any groundwater used for domestic purposes or cause an increase in any quality parameter that would make groundwater unsuitable for irrigation use.

3. The Discharger shall maintain in good working order and operate as efficiently as possible any facilities or control system installed by the Discharger to achieve compliance with the waste discharge requirements.

4. Both the aeration ponds and the percolation ponds shall be in a fenced area and shall be clearly identified with conspicuous warning signs to inform the public that the water contained therein is wastewater and is unfit for human consumption.

5. If pumps are used in the collection system, a high water level alarm shall be installed in each pump station wet well to prevent the occurrence of sewage spill resulting from power failure or mechanical breakdown.

Aeration/Storage Ponds

6. The ponds shall be adequately protected from erosion, washout, and flooding from a rainfall event having a predicted frequency of once in 100 years.

7. To prevent threat of overflows, a minimum freeboard of 2 feet shall be maintained in the ponds at all times.

8. Water at the surface of the aeration ponds shall meet the following quality limits at all times:

In any grab sample:

Dissolved Oxygen	2.0 mg/l minimum
Dissolved Sulfide	0.1 mg/l maximum

pH	6.0 minimum 9.0 maximum

9. The aeration ponds shall be underlain by an impermeable layer which will allow a percolation rate of not more than 10^{-6} cm/sec.

Evaporation/Percolation Ponds

10. The wastewater discharged to the percolation ponds shall at all times be an adequately treated wastewater and shall meet the following quality limits:

    In any grab sample:

BOD	40 mg/l maximum
Settleable Solids	0.5 ml/l-hr maximum
Dissolved Oxygen	2.0 minimum
Dissolved Sulfide	0.1 maximum

    The Discharger shall discontinue discharging wastewater to the percolation ponds at any time where there is reason to believe the limits specified above are not being met.

11. A minimum freeboard of one foot in the evaporation/percolation ponds shall be kept at all times during the period of April 16 through September 15. Between September 16 and October 15, water level in the evaporation/percolation ponds shall be lower than six inches (6").

C. Provisions

1. The Discharger shall comply with a Self-Monitoring Program as ordered by the Executive Officer.

2. The Discharger shall permit the Board or its authorized representatives in accordance with California Water Code Section 13267(c):

    (a) Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this order;

    (b) Access to and copy at reasonable times any records that must be kept under the conditions of this order;

    (c) Inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this order; and

    (d) Photograph, sample, and monitor at reasonable times for the purpose of assuring compliance with this order.

3. When an approved public sanitary sewer is within 400 feet of the

ponds, the Discharger shall submit a technical report to the satisfaction of the Executive Officer and time schedule describing how the ponds will be abandoned and connection made to the sanitary sewer.

4. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this Board.

5. The Discharger shall file with the Regional Board a report on waste discharge at least 120 days before making any material change in the character, location, or volume of the wastewater.

6. In the event the Discharger is unable to comply with any of the conditions of this Order due to:

   (a) Breakdown of waste treatment equipment;

   (b) Accidents caused by human error or negligence; or

   (c) Other causes such as acts of nature,

   the Discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

7. The Board will review this Order periodically and may revise the requirements when necessary.

8. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

   (a) Violation of any term or condition contained in this Order;

   (b) Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;

   (c) Endangerment to public health or environment that can only be regulated to acceptable levels by order modification or termination; and

   (d) Any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

9. In reviewing compliance with Prohibition A.1. and Discharge Specification B.7. of this Order, the Board will take special note of the difficulties encountered in achieving compliance during entire wet seasons having a rainfall recurrence interval

of greater than once in ten years.

10. All equipment including pumps, piping and valves, storage ponds, etc. which may at any time contain wastes shall be adequately and clearly identified with warning signs and the Discharger shall make all necessary provisions, in addition, to inform the public that the liquid contained therein is wastewater and is unfit for human consumption.

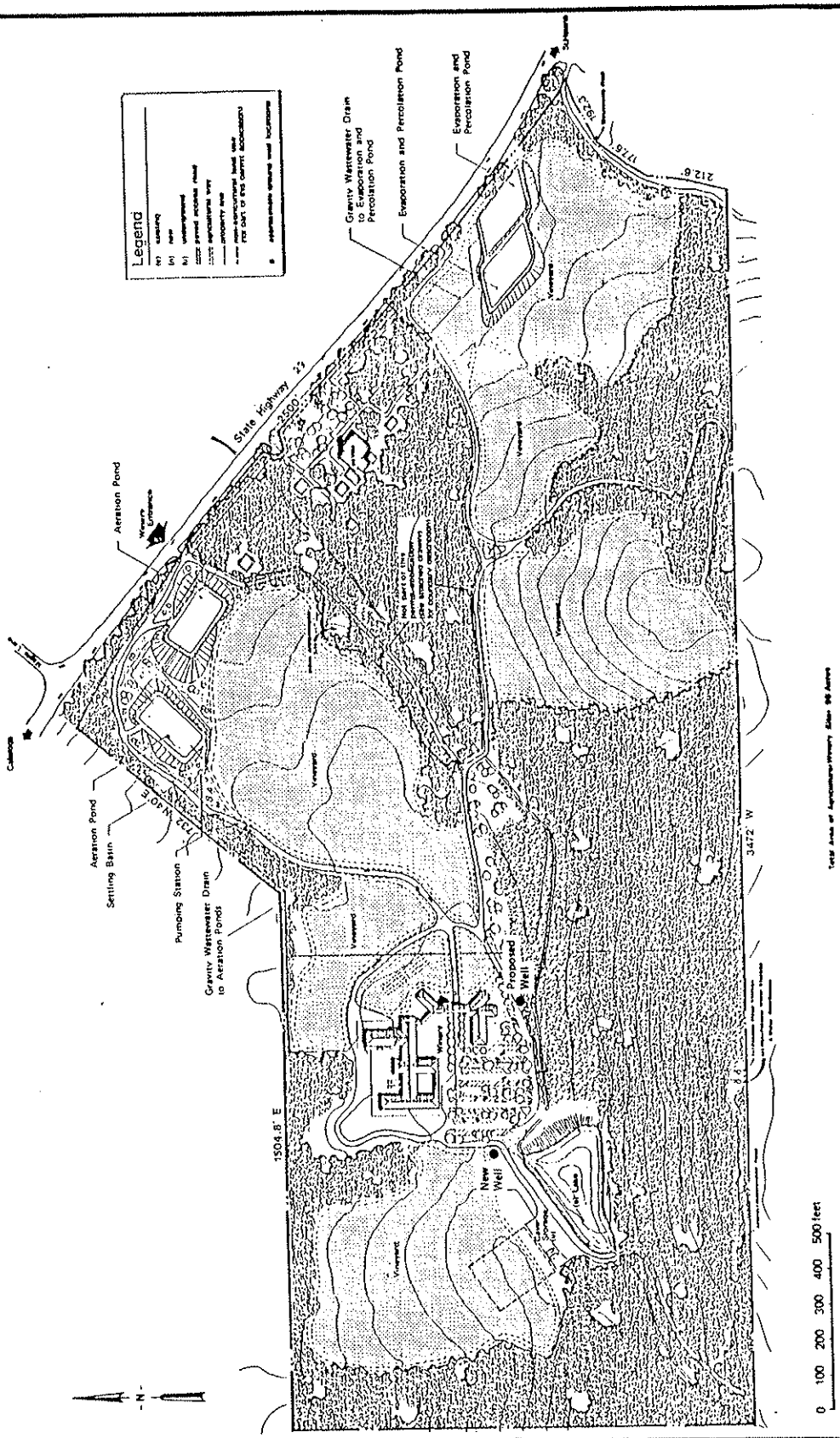
11. By October 1 of each year, the Discharger shall submit a report, to the satisfaction of the Executive Officer, containing the freeboard of each aeration ponds, and an assessment of the ability of the ponds to maintain the minimum required freeboard throughout the wet season, taking into consideration of the inputs from anticipated rainfall and wastewater flow.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 18, 1988.

Lawrence P. Kolb
for
ROGER B. JAMES
Executive Officer

Attachments:
Location Map
Self-Monitoring Program

[File No. 2139.3098]
[Originator/RL]
[Reviewer/RJC]



STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ATTACHMENT A: Site Map
St. Michael Winery
Calistoga, Napa County

DRAWN BY:	DATE:	DRWG. NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

FINAL

SELF-MONITORING PROGRAM

FOR

ST. MICHAEL WINERY

NAPA COUNTY

ORDER NO. 88-079

CONSISTS OF

PART A

PART A

ST. MICHAEL WINERY

I. GENERAL

Basis

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

Purpose

The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board; and

2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

II. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the 40 CFR S136 or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health (DOHS) or a laboratory waived by the Executive Officer from obtaining a certification for these analyses by the DOHS. The director of the laboratory whose name appears on the certification or his/her laboratory supervisor who is directly responsible for analytical work performed shall supervise all analytical work including appropriate quality assurance/quality control procedures in his or her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

III. DEFINITION OF TERMS

1. A grab sample is defined as an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with daily maximum limits and instantaneous maximum limits. Grab samples represent only the condition that exists at the time the wastewater is collected.

2. A flow sample is defined as the accurate measurement of the average daily flow volume using a properly calibrated and maintained flow measuring device.

3. Standard Observations

a. Land Retention or Disposal Area

This applies both to liquid and solid wastes confined or unconfined.

(1) For each impoundment determine amount of the freeboard at lowest point of dikes confining liquid wastes.

(2) Evidence of leaching liquid from area of confinement and estimated size of affected area. (Show affected area on a sketch and estimate volume of flow.)

(3) Odor: presence or absence, characterization, source, and distance of travel.

(4) Estimated number of waterfowl and other water-associated birds in the disposal area and vicinity.

(5) Existence of warning signs or notices along the pond perimeter to properly inform the public of the disposal of wastewater.

IV. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

1. DESCRIPTION OF SAMPLING STATIONS

Station	Description
A. INFLUENT	
A-001	At any point in the treatment facilities headworks where all waste tributary to the system is present, excluding any plant recirculation or other sidestream wastes.
B. AERATION/STORAGE PONDS	
Station	Description
P-1 and P-2	Located in ponds 1 and 2, respectively, at a point about one foot below the water surface and no less than two feet from the bank, representative of the wastewater.

C. EVAPORATION/PERCOLATION PONDS

Station	Description
E-1	Located at any point in the effluent from aeration ponds prior to discharging to the percolation ponds.

D. LAND OBSERVATION

Station	Description
L-1 thru L-'n'	Located at ends and midpoints of the perimeter levees of all the aeration and percolation ponds.

E. GROUNDWATER MONITORING

Station	Description
G-1 and G-2	Two groundwater monitoring wells to be located in the vicinity of the percolation ponds area, upslope and downslope of the local groundwater gradient. Location of the wells is to be determined based on recommendations from certified geologist and shall be approved by the Executive Officer of the Board. The wells must be installed prior to the start-up of the percolation ponds.

2. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS

The Discharger is required to perform observations, sampling, and analyses according to the schedule given in Table 1. (Attachment A)

V. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Report of Permit Violation:

In the event the Discharger violates or threatens to violate the conditions of the waste discharge requirements and prohibitions due to:

(a) maintenance work, power failure, or breakdown of waste treatment equipment; or

(b) accidents caused by human error or negligence; or

(c) other causes such as acts of nature;

the Discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within seven working days of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problems from recurring.

2. Self-Monitoring Reports

Written reports shall be filed regularly for each calender quarter (ending at March, June, September, and December) and filed no later than the fifteenth day of the following month. The reports shall be comprised of the following:

a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, actions taken or planned for correcting violations, such as operation modifications and/or facilities expansion. If the Discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete.

b. Results of Analyses and Observations

Tabulations of the results from each required analysis and/or observations specified in Table 1 (Attachment A) by date, time, type of sample, and station.

c. List of Approved Analyses

(1) Listing of analyses for which the Discharger is approved by the State Department of Health Services.

(2) List of analyses performed for the Discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

I, Roger B. James, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with the Waste Discharge Requirements established in Regional Board Order No. 88-079.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger, and revisions will be ordered by the Executive Officer.

for ROGER B. JAMES
Executive Officer

Effective Date: May 18, 1988

Attachments:
A. Table I

ATTACHMENT A

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES
(St. Michael Winery)

SAMPLING STATIONS	(2) A-1	all P	all E	all L	all G
Type of Samples	Flow	G	G	O	G
Flow Rate, (gpd)	M				
pH, (unit)		M			
Dissolved Oxygen, (mg/l)		M	M		
BOD, (mg/l)			M		
Settleable Solids, (ml/l-hr)			M		
Total Coliform, (MPN/100ml)					Q
Nitrate, (mg/l)					Q
Total Dissolved Solids, (mg/l)					Q
Dissolved Sulfides, (mg/l), (1)		M	M		
Applicable Standard Observations				W	

LEGEND FOR TABLE 1

Type of Sample

G= Grab sample,
O= Observations,
Flow= Flow measurement

Sampling Frequency

D= Daily,
W= Once per week,
M= Monthly,
Q= Quarterly,

Notes:

(1). Analyze for this item only when Dissolved Oxygen is below 2.0 mg/l.

(2). Monthly, determine average daily flow, reported in gallons per day (GPD).